Exhibit 1
to Response

New England Journal of Medicine

From Wikipedia, the free encyclopedia

The New England Journal of Medicine (*N Engl J Med* or **NEJM**) is an English-language peer-reviewed medical journal published by the Massachusetts Medical Society. It is one of the most popular and widely-read peer-reviewed general medical journals in the world. It is also the oldest continuously published medical journal in the world.

The New England Journal of Medicine	
Abbreviated title	N Engl J Med
Discipline	peer-reviewed medical journal
Language	English
Publication details	
Publisher	Massachusetts Medical Society (USA)
Publication history	founded 1812
Indexing	
ISSN	0028-4793 (http://worldcat.org/issn/0028-4793)
Links	
▪ Journal homepage (http://www.nejm.org/)	

Contents

History

The NEJM was founded by Dr. John Collins Warren in 1812 as a quarterly called *The New England Journal of Medicine and Surgery*. In 1828, it became a weekly, and was renamed *The Boston Medical and Surgical Journal*; one hundred years later, it took on its present name.

It publishes editorials, papers on original research, widely-cited review articles, correspondences, case reports, and has a special section called "Images in Clinical Medicine".

Authors have included Oliver Wendell Holmes, Sr., Hans Zinsser, and Lewis Thomas. One of its early editors, Jerome V. C. Smith, resigned in 1857 to assume his duties as mayor of the City of Boston.

Influence

The website for the George Polk Awards noted that its 1977 award to the *New England Journal of Medicine* "provided the first significant mainstream visibility for a publication that would achieve enormous attention and prestige in the ensuing decades"[1]

The journal usually has the highest impact factor of the journals of clinical medicine (including the *Journal of the American Medical Association*, and *The Lancet*); in 2006, the impact factor was 51, according to Journal Citation Reports, the first research journal to break 50.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Assistant Commissioner for Patents
Washington, D.C. 20231

On 7 May 2008

TOWNSEND and TOWNSEND and CREW LLP

By: Malinda Dwight

PATENT
Attorney Docket No.: 015280-317100US
Client Reference No.: E-059-97/1f

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

FitzGerald *et al.*

Application No.: 09/381,497

Filed: February 17, 2000

For: RECOMBINANT ANTIBODIES AND IMMUNOCONJUGATES TARGETED TO CD-22 BEARING CELLS AND TUMORS

Confirmation No. 4036

Examiner: Parithosh K. Tungaturthi

Technology Center/Art Unit: 1643

DECLARATION OF DR.ROBERT J. KREITMAN UNDER 37 C.F.R. §1.132

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

I, Dr. Robert J. Krietman, being duly warned that willful false statements and the like are punishable by fine or imprisonment or both, under 18 U.S.C. § 1001, and may jeopardize the validity of the patent application or any patent issuing thereon, state and declare as follows:

1. All statements herein made of my own knowledge are true and statements made on information or belief are believed to be true.

2. I received in M.D. in 1985 from the Ohio State University. My internal residency training was at Duke University and my medical oncology fellowship training at the National Institutes of Health.

3. I currently hold the position of Chief, Clinical Immunotherapy Section, Laboratory of Molecular Biology, National Cancer Institute. I have been involved in research and developing immunotoxin agents for cancer therapy since 1989. I have participated as a investigator in over 10 clinical trials to investigate candidate therapeutic agents for the treatment of B-cell malignancies. A copy of by curriculum vitae is attached as Appendix A.

4. This Declaration is provided to attest to the fact that the level of efficacy that we observed in a phase I clinical trial using RFB4(ds)Fv-PE38 for the treatment of hairy cell leukemia (HCL) was unexpected.

5. RFB4(dsFv)-PE38 (referred to here as BL22) is a recombinant immunotoxin in which an RFB4 disulfide stabilized Fv fragment is joined to a truncated *Pseudomonas* exotoxin, PE38. The disulfide-stabilized Fv has a V_H with a cysteine residue at position 44 and a V_L with a cysteine residue at amino acid position 100. We first assessed the toxicity and activity of BL22 in 16 patients with purine-resistant HCL in a Phase I dose-escalation trial. The results demonstrated a high response rate: of the 16 HCL patients treated with the immunoconjugate, 11 achieved complete remissions and 2 achieved partial responses. The patients that achieved complete remission included three that had a poor-prognosis variant of HCL that responds poorly to any of the commonly used chemotherapeutic agents for HCL. These preliminary results were striking enough to warrant publication in the *New England Journal of Medicine* (*N Engl. J. Med* 345:242-247, 2001).

6. In total, 31 patients with hairy cell leukemia were evaluated in the phase I study. O f these patients, 19 (61%) had complete remissions and six (19%) had partial responses. Thus, 80% of the patients exhibited a response. Rituximab, which targets CD20, has been tested in small trials of HCL patients. In these tests, a total of 18 (30%) of 60 patients achieved complete remission. Furthermore, as we noted in our report in the *N. Engl. J. Med* article, we are unaware of any other treatment, including interferon alpha, fludarabine, chorambucil, and mutliagent chemotherapy, that can produce such a high rate of complete remission in purine analog-resistant

HCL. Complete remission can be achieved using purine analogs, however, there is a 13% to 50% incidence of minimal residual disease, defined as collections of $CD20^+$ or $TRAP^+$ cells in the bone marrow biopsy by immunohistochemistry. In the 19 patients that achieved complete remission with BL22, only one patient had minimal residual disease as defined by these criteria. Thus, BL22 is also capable of inducing complete remission without minimal residual disease in a high percentage of patients. In summary, although we had expected BL22 to exhibit a positive clinical effect for the treatment of HCL, we were surprised at this unprecedented high level of response in these patients.

Dated: 4/24/08

Robert J. Kreitman, M.D.

Appendix A
to Declaration

CURRICULUM VITAE

Name: Robert J. Kreitman, M.D.

Date and Place of Birth: November 11, 1959; Columbus, OH

Citizenship: United States

Marital Status: Married, three children

Education and Training:

September 1978-May 1981--	Bachelor of Science Kent State University Kent, Ohio Majors: Chemistry and Pre-Medicine
September 1981-June 1985--	Doctor of Medicine Ohio State University College of Medicine Columbus, Ohio
July 1985-June 1988--	Internal Medicine Residency Duke University Medical Center Durham, North Carolina
July 1988-June 1991	Medical Oncology Fellowship National Cancer Institute Bethesda, Maryland

Board Certification:

1983-1985	National Medical Boards, Parts I-III
1988	Internal Medicine Boards
1991	Medical Oncology Boards
2001	Recertified, Medical Oncology Boards

Brief Chronology of Employment:

July 1985-June 1988	Internal Medicine Residency, Duke University Medical Center, Durham, North Carolina

July 1988-June 1991	Medical Oncolgy Fellowship, National Cancer Institute (NCI), Bethesda, MD
July 1988-October 1989	Medical Staff Fellow, NCI (Civil Service)
October 1989 - June 1992	Clinical Associate, NCI, NIH, United States Public Health Service (USPHS)
July 1992 - May 1994	Senior Clinical Investigator, NCI (USPHS)
May 1994-June 2000	Lead Clinical investigator, Tenured member, NCI (USPHS)
June 2000-present	Chief, Clinical Immunotherapy Section, Laboratory of Molecular Biology, NCI (USPHS)
Current Rank	Captain (Temp O6, Perm O6), USPHS

Short Biography:

Dr. Kreitman received his M.D. from Ohio State University in 1985 and training in Internal Medicine at Duke University Medical Center from 1985 to 1988. He completed a fellowship in Medical Oncology at the National Institutes of Health, where he has remained working in the development of new recombinant biologic therapy for Cancer. He now is Chief of the Clinical Immunotherapy Section of the Laboratory of Molecular Biology in the National Cancer Institute. He directs both clinical and laboratory research teams testing and developing these therapies.

Societies:

American Medical Association (AMA)

Commissioned Officers Association (COA)

American Association for Cancer Research (AACR)

American Society of Hematology (ASH)

Molecular Medicine Society

American College of Physicians (ACP)

American Society of Clinical Oncology (ASCO)

Honors & Other Special Scientific Recognition:

September 1978 - May 1981:

Advanced placement credit from high school 1 1/3 years.

First Place winner of $6000 Waldo Semon Vinyl Chemistry Scholarship Exam

Lubrizol Chemistry Award

Graduated Magna Cum Laude with General Honors for Senior Research Thesis

1982 Elected to Landacre Honorary Research Society

1985 Geriatric Medicine Award

1988 Case Report Award

1994 Federal Technology Transfer Award

1998 Bicentennial unit commendation, USPHS

1999 Commendation Medal, USPHS

1999 Federal Technology Transfer Award

2000 Competative Supplement Award, NIH

2000 DBS Technology Transfer Award

2001 Outstanding Service Medal, USPHS

2001-2007 Technology transfer awards

July 2007 Competative promotion to Permanent O6, USPHS.

Involvement in Clinical Trials:

1. Phase I study of anti-Tac(Fv)-PE38 (LMB-2), a recombinant single-chain immunotoxin for treatment of Tac-expressing malignancies (Principal Investigator).

2. Phase I/II study of adjuvant therapy for recurrent malignant glioma using Interleukin-4 Pseudomonas exotoxin (Associate Investigator).

3. Phase I study of BL22 recombinant immunotoxin for treatment of B-cell leukemias and lymphomas (Principal Investigator).

4. HLA-mismatched peripheral blood mobilized precursor transplantation followed by T cell add-back for high risk hematologic malignancies (Associate Investigator).

5. Phase I study of the recombinant toxin DT388-GM-CSF in patients with recurrent acute myelogenous leukemia (Associate Investigator)

6. Phase I Study of LMB-9, a Recombinant Disulfide Stabilized Immunotoxin for Advanced Carcinomas that Express Lewis Y Antigen (Principal Investigator).

7. Phase I Study of SS1(dsFv)-PE38 Anti-Mesothelin Immunotoxin in Advanced Malignancies: Continuous Infusion x 10 days (Principal Investigator).

8. Phase I Study Of BL22, A Recombinant Immunotoxin For Chronic Lymphocytic Leukemia and CD22+ Lymphomas (Principal Investigator)

9. Phase I Study of LMB-9, a Recombinant Disulfide Stabilized Anti-Lewis Y Immunotoxin Administered by 5- days Continuous Infusion for Patients with Colo-Rectal, Oesophageal, Pancreatic or Gastric carcinoma that express Lewis Y-Antigen (Co-investigator)

10. Phase II Trial of BL22 Immunotoxin in Hairy Cell Leukemia (Principal Investigator)

11. A Phase I Study of LMB-9, a Recombinant Disulfide Stabilized Anti-Lewis Y Immunotoxin Administered by 5- days Continuous Infusion for Patients with Colo-Rectal Adenocarcinoma (Collaborator)

12. A Phase II Clinical Trial of Anti-Tac(Fv)-PE38 (LMB-2) Immunotoxin for Treatment of CD25 Positive Cutaneous T-Cell Lymphomas (Principal Investigator)

13. Pediatric Phase I Trial of LMB-2 for Refractory CD25-Positive Leukemias and Lymphomas (Associate Investigator)

14. Pediatric Phase I Trial of BL22 for Refractory CD22-Positive Leukemias and Lymphomas (Associate Investigator)

15. Hematologic Malignancy Biology Study (Associate Investigator)

16. A Pilot Clinical Trial of Anti-Tac(Fv)-PE38 (LMB-2) Immunotoxin for Treatment of CD25 Positive Hodgkin's Disease after Fludarabine and Cyclophosphamide. (Principal Investigator)

17. A Phase II Clinical Trial of Anti-Tac(Fv)-PE38 (LMB-2) Immunotoxin for CD25 Positive Hairy Cell Leukemia (Principal Investigator)

18. A Phase 1, Multicenter, Dose Escalation Study of CAT-8015 in Patients with Relapsed or Refractory Hairy Cell Leukemia (HCL) (Principal Investigator)

19. A Phase 1, Multicenter, Dose Escalation Study of CAT-8015 in Patients with Relapsed or Refractory Chronic Lymphocytic Leukemia (CLL), Prolymphocytic Leukemia (PLL), or Small Lymphocytic Lymphoma (SLL) (Principal Investigator)

20. A Phase 1, Multicenter, Dose Escalation Study of CAT-8015 in Patients with Relapsed or Refractory Non-Hodgkin's Lymphoma (NHL) (Principal Investigator)

21. Extended Access Protocol of CAT-3888 Immunotherapy in Relapsed or Refractory Hairy Cell Leukemia (HCL) Patients who have Previously Received Pseudomonas-Exotoxin Immunotoxins (Principal Investigator)

22. Pilot Trial of LMB-2 after Fludarabine and Cyclophosphamide for CD25 Positive Lymphoid Malignancies (Principal Investigator)

Grant review experience:

1. Department of Energy Study Section, 1994.

2. American Cancer Society Study Section, 1995.

3. Department of Energy Individual Grant Review, May, 1997.

4. Department of Energy Individual Grant Review, December, 1997.

5. United States-Israel Binational Science Foundation, May, 1999

6. Leukemia Busters grant, Fall, 2007

Invited Talks:

Fifth International Conference on Immunopharmacology
Tampa, Florida, May, 1991

Experimental Pharmacology Meeting
Orlando, Florida, 1992

Gordon Conference, Tilden, New Hampshire,

Lilly Oncology Global Medical Conference
Indianapolis, Indiana, May, 1996

Fourth Workshop on Targeted Cancer Therapy, UICC Cancer treatment Program, Bethesda, Maryland, August, 1996

Seminar, University of Arkansas Department of Medical Oncology, Little Rock, Arkansas, 1996

IBC's International Conference on Novel Therapeutic Proteins for Oncology, San Diego, California, 1998

Seminar, UCLA Departments of Medical Oncology/Urology
Los Angeles, California, July, 1998

Phase I Meeting, Gaithersburg Hilton, Gaithersburg, MD September, 1998

Lymphoma and Leukemia Interest Group Seminar, NIH, September, 1998

4th European Conference on Gene Therapy of Cancer
Milan, Italy, September, 1998

Johns Hopkins Leukemia Group, Johns Hopkins University Hospital, October, 1998.

UICC International Conference, Bermuda, November, 1998

University of Minnisota College of Medicine, Minneapolis, MN, December, 1998.

IBC's 9th Annual International Conference on Antibody Engineering Conronado, California, December, 1998

CBER Seminar, FDA, January, 1999.

Cancer Center Grand Rounds, Wake Forest University School of Medicine, Winston-Salem, NC, January, 1999.

Seminar, Cornell University Medical School Center for Lymphoma and Leukemia, New York, NY, January, 1999.

FDA workshop on "Characterization of conjugated proteins", Mayflower Hotel, Washington, DC, January, 1999.

Grand Rounds, NCI, Bethesda, MD, February, 1999.

Annual Meeting of the Society for Industrial Microbiology, Arlington, VA, August, 1999.

Seminar, The Technion, Haifa, Israel, December, 1999.

Minisymposium, American Association for Cancer Research Annual Meeting, San Francisco, April, 2000.

Discussion, American Society of Clinical Oncology Annual Meeting, New Orleans, LA, May, 2000

Recombinant Antibodies, Baltimore, MD, June, 2000

Seminar, Washington Hospital Center, September, 2000.

NIH Director's Seminar, NIH, Bethesda, MD, December, 2000

Recombinant Antibody Conference, San Diego, CA, December, 2000

American Society of Hematology Simultaneous Session, San Francisco, CA, December, 2000

Seminar, Department of Transfusion Medicine, NIH, January, 2001

AACR meeting, New Orleans, LA, March, 2001.

AACR press conference on highlighted abstract, New Orleans, LA, March, 2001.

ASCO meeting, San Francisco, CA, May, 2001.

International Conference on B Cell Lymphoproliferative Disorders, Amsterdam, The Netherlands, June, 2001.

Bench to Bedside Talk, NIH, June, 2001.

IBC conference, Munich, GE, July, 2001.

Biopharmaceutical Development Program Retreat, Frederick, MD, August, 2001

Sixth International Symposium, Biologic Therapy of Cancer, Munich, GE, September, 2001.

IBC conference, San Diego, December, 2002.

Foundation for Promotion of Cancer Research, 15th International Symposium, Tokyo, Japan, January 17, 2002

Seminar, Washington Hospital Center, Washington, DC, January 25, 2002

Surgery Conference, NIH, March 4, 2002.

AACR meeting, San Francisco, April 8, 2002

ASCO meeting, Orlando, May 20, 2002

1st International Congress on Targeted Therapies in Cancer, Washington, DC, August 18, 2002.

2nd International Congress on Monoclonal Antiodies in Cancer, Bamff, Alberta, Canada, August 29, 2002.

Global Organization against Leukemia - Leukemia 2002, Miami, FL, September 19, 2002.

Keynote Speaker, 18th Annual Medical School Research Day, Wake Forest University Medical School, Winston-Salem, NC, October 2, 2002.

Pediatric Oncology Branch Seminar, December 13, 2002.

Grand Rounds, Washington Hospital Center, Washington DC, March 17, 2002.

M.D. Anderson Seminar, Houston, TX, May 12, 2003

Recombinant Antibody Conference, Boston, MA, May 15, 2003

Immunocytochemistry Meeting, Phoenix, AR, May 29, 2003

Seminar, Dept. of Transfusion Medicine, NIH, January 23, 2004.

IBC conference on Recobminant Antibodies, Munich, Germany, May 19, 2004.

Seminar, Medical Oncology Clinical Research Unit, NCI, May 21, 2004.

4th International Congress on Monoclonal Antibodies, Colorado Springs, Sept. 6, 2004.

Talk on BL22 at Genecor International, San Franscisco, CA, October 12, 2004.

Talk, Genencor International, San Franscisco, CA, July 9, 2005.

Talk for Dinisco/Cambridge Antibody Technology, Bethesda, October 19, 2005.

IBC conference, London, March 15, 2006

Talk for Targeted Tumor Therapies Conference, Berlin, March 30, 2006.

AACR annual meeting, minisymposium, Washington, DC, April 5, 2006.

Cambridge Antibody Technologies Expert's meeting on SS1P, October 18, 2006.

American Cancer Society Meeting, Albuquerque, NM, November 1, 2006.

Department of Transfusion Medicine Seminar, February 23, 2007.

Grand Rounds, Washington Hospital Center, September 7, 2007.

Annual Bertha Bouroncle honorary lecture, Ohio State Univ., May, 2008.

Editorial Board:

1. Oncology Reports
2. Current Molecular Medicine
3. Section Editor/ Advisory board for Expert Opinion on Biological Therapy
4. Editorial Advisory Board member for Current Molecular Medicine

Patents

1. Circularly permuted IL4 toxin.
2. Recombinant Immunotoxin BL22
3. Improved version of LMB-2 immunotoxin with reduced toxicity
4. Improved version of BL22 with increased affinity
5. Assay for soluble CD22 for measuring tumor burden in B-cell lymphomas.
6. PEGylation of linkers to improve antitumor activity and reduce toxicity of immunoconjugates.
7. Mutated Pseudomonas exotoxins with reduced antigenicity
8. Anti-CD30 antibodies suitable for immunotoxins

Special panels

1. Ricin Toxin Expert Panel Workshop held in Bethesda, MD on April 1 - 2, 2004.

Research Interests

1. Clinical development of recombinant anti-CD22 immunotoxins in patients with hematologic B-cell malignancies.
2. Clinical development of recombinant anti-CD25 immunotoxin in patients with hematologic malignancies.
3. Characterization of hairy cell leukemia with respect to normal T-cell and B-cell repertoire, and immunoglobulin recombinations expressed by the leukemic cells.
4. Development of a high sensitivity clone-specific PCR assay for minimal residual disease in hairy cell leukemia.
5. Development of soluble CD22 as a marker for B-cell malignancies.
6. Study of the renal excretion of recombinant immunotoxins in patients, and study of the mechanisms of hemolytic uremic syndrome in patients treated with recombinant immunotoxin BL22.

Present Home Address: 11915 Reynolds Ave.
Potomac, MD 20854
Tel: (301) 217-9242 (H)
(301) 496-4797 (W)

BIBLIOGRAPHY

1. Kreitman, R.J., Chaudhary, V.K., Waldmann, T., Willingham, M.C., FitzGerald, D.J., and Pastan, I.: The recombinant immunotoxin anti-Tac(Fv)-*Pseuodomonas* exotoxin 40 is cytotoxic toward peripheral blood malignant cells from patients with adult T-cell leukemia. *Proc. Natl. Acad. Sci. USA* 87: 8291-8295, 1990.
2. Siegall, C.B., Kreitman, R.J., FitzGerald, D.J., and Pastan, I.: Antitumor effects of interleukin 6-*Pseudomonas* exotoxin chimeric molecules against the human hepatocellular carcinoma, PLC/PRF/5 in mice. *Cancer Res.* 51: 2831-2836, 1991.
3. Kreitman, R.J., FitzGerald, D., and Pastan, I.: Targeting growth factor receptors with fusion toxins. *Int. J. Immunopharmac.* 14: 465-472, 1992.
4. Kreitman, R.J., Chaudhary, V.K., Siegall, C.B., FitzGerald, D.J., and Pastan, I.: Rational design of a chimeric toxin: an intramolecular location for the insertion of transforming growth factor a within *Pseudomonas* exotoxin as a targeting ligand. *Bioconjug. Chem.* 3: 58-62, 1992.
5. Kreitman, R.J., Siegall, C.B., Chaudhary, V.K., FitzGerald, D.J., and Pastan, I.: Properties of chimeric toxins with two recognition domains: interleukin 6 and transforming growth factor a at different locations in *Pseudomonas* exotoxin. *Bioconjug. Chem.* 3: 63-68, 1992.
6. Kreitman, R.J., Siegall, C.B., FitzGerald, D.J.P., Epstein, J., Barlogie, B., and Pastan, I.: Interleukin-6 fused to a mutant form of *Pseudomonas* exotoxin kills malignant cells from patients with multiple myeloma. *Blood* 79: 1775-1780, 1992.
7. FitzGerald, D., Kreitman, R.J., and Pastan, I.: Generation of chimeric toxins. In: A. Frankel (ed.), *Genetically Engineered Toxins*. New York, Marcel Dekker, Inc., 1992, pp. 447-461
8. Kreitman, R.J., Schneider, W.P., Queen, C., Tsudo, M., FitzGerald, D.J.P., Waldmann, T.A., and Pastan, I.: Mik-b1(Fv)-PE40, a recombinant immunotoxin cytotoxic toward cells bearing the b-chain of the IL-2 receptor. *J. Immunol.* 149: 2810-2815, 1992.
9. Kreitman, R.J., Chaudhary, V.K., Kozak, R.W., FitzGerald, D.J.P., Waldmann, T.A., and Pastan, I.: Recombinant toxins containing the variable domains of the anti-Tac monoclonal antibody to the interleukin-2 receptor kill malignant cells from patients with chronic lymphocytic leukemia. *Blood* 80: 2344-2352, 1992.
10. Spence, C., Nachman, M., Gately, M.K., Kreitman, R.J., Pastan, I., and Bailon, P.: Affinity purification and characterization of Anti-Tac(Fv)-C3-PE38KDEL: A highly potent cytotoxic agent specific to cells bearing IL-2 receptors. *Bioconjugate Chem.* 4: 63-68, 1992.

11. Kreitman, R.J., Batra, J.K., Seetharam, S., Chaudhary, V.K., FitzGerald, D.J., and Pastan, I.: Single-chain immunotoxin fusions between anti-Tac and *Pseudomonas* exotoxin: relative importance of the two toxin disulfide bonds. *Bioconjug. Chem.* 4: 112-120, 1993.
12. Kreitman, R.J., Hansen, H.J., Jones, A.L., FitzGerald, D.J.P., Goldenberg, D.M., and Pastan, I.: *Pseudomonas* exotoxin-based immunotoxins containing the antibody LL2 or LL2-Fab' induce regression of subcutaneous human B-cell lymphoma in mice. *Cancer Res.* 53: 819-825, 1993.
13. Theuer, C.P., Kreitman, R.J., FitzGerald, D.J., and Pastan, I.: Immunotoxins made with a recombinant form of *Pseudomonas* exotoxin A that do not require proteolysis for activity. *Cancer Res.* 53: 340-347, 1993.
14. Mesri, E.A., Kreitman, R.J., Fu, Y.-m., Epstein, S.E., and Pastan, I.: Heparin-binding transforming growth factor a-*Pseudomonas* exotoxin A. *J. Biol. Chem.* 268: 4853-4862, 1993.
15. Kreitman, R.J., Chaudhary, V.K., Waldmann, T.A., Hanchard, B., Cranston, B., FitzGerald, D.J.P., and Pastan, I.: Cytotoxic activities of recombinant immunotoxins composed of *Pseudomonas* toxin or diphtheria toxin toward lymphocytes from patients with adult T-cell leukemia. *Leukemia* 7: 553-562, 1993.
16. Debinski, W., Puri, R.K., Kreitman, R.J., and Pastan, I.: A wide range of human cancers express interleukin 4 (IL4) receptors that can be targeted with chimeric toxin composed of IL4 and *Pseudomonas* exotoxin. *J. Biol. Chem.* 268: 14065-14070, 1993.
17. Fu, Y.-m., Mesri, E.A., Yu, Z.-x., Kreitman, R.J., Pastan, I., and Epstein, S.E.: Cytotoxic effects on vascular smooth muscle cells of the chimeric toxin heparin binding TGFa-*Pseudomonas* exotoxin. *Cardiovasc. Res.* 27: 1691-1697, 1993.
18. Kreitman, R.J., Bailon, P., Chaudhary, V.K., FitzGerald, D.J.P., and Pastan, I.: Recombinant immunotoxins containing anti-Tac(Fv) and derivatives of *Pseudomonas* exotoxin produce complete regression in mice of an interleukin-2 receptor-expressing human carcinoma. *Blood* 83: 426-434, 1994.
19. Kreitman, R.J., and Pastan, I.: Purification and characterization of IL6-PE^{4E}, a recombinant fusion of interleukin 6 with *Pseudomonas* exotoxin. *Bioconjug. Chem.* 4: 581-585, 1993.
20. Saito, T., Kreitman, R.J., Hanada, S.-i., Makino, T., Utsunomiya, A., Sumizawa, T., Arima, T., Chang, C.N., Hudson, D., Pastan, I., and Akiyama, S.-i.: Cytotoxicity of recombinant Fab and Fv immunotoxins on adult T-cell leukemia lymph node and blood cells in the presence of soluble interleukin-2 receptor. *Cancer Res.* 54: 1059-1064, 1994.
21. Puri, R.K., Debinski, W., Obiri, N., Kreitman, R., and Pastan, I.: Human renal cell carcinoma cells are sensitive to the cytotoxic effect of a chimeric

protein composed of human interleukin-4 and *Pseudomonas* exotoxin. *Cell. Immunol.* 154: 369-379, 1994.

22. Puri, R.K., Mehrotra, P.T., Leland, P., Kreitman, R.J., Siegel, J.P., and Pastan, I.: A chimeric protein comprised of IL-4 and *Pseudomonas* exotoxin is cytotoxic for activated human lymphocytes. *J. Immunol.* 152: 3693-3700, 1994.
23. Kreitman, R.J., FitzGerald, D.J., and Pastan, I.: New anti-leukemia agents: recombinant immunotoxins. In: K. Atkinson (ed.), *Clinical bone marrow transplantation: a reference textbook.* Cambridge, Cambridge University Press, 1994, pp. 623-628
24. Kreitman, R.J., and Pastan, I.: Recombinant single-chain immunotoxins against T and B cell leukemias. *Leuk. Lymphoma* 13: 1-10, 1994.
25. Kreitman, R.J., and Pastan, I.: Recombinant Toxins. In: J. T. August, M. W. Anders, F. Murad and J. T. Coyle (ed.), *Advances in Pharmacology.* San Diego, Academic Press, Inc., 1994, pp. 193-219
26. Kreitman, R.J., Chang, C.N., Hudson, D.V., Queen, C., Bailon, P., and Pastan, I.: Anti-Tac(Fab)-PE40, a recombinant double-chain immunotoxin which kills interleukin-2-receptor-bearing cells and induces complete remission in an *in vivo* tumor model. *Int. J. Cancer* 57: 856-864, 1994.
27. Reiter, Y., Brinkmann, U., Kreitman, R.J., Jung, S.-H., Lee, B., and Pastan, I.: Stabilization of the Fv fragments in recombinant immunotoxins by disulfide bonds engineered into conserved framework regions. *Biochemistry* 33: 5451-5459, 1994.
28. Kreitman, R.J., Puri, R.K., and Pastan, I.: A circulalry permuted recombinant interleukin 4 toxin with increased activity. *Proc. Natl. Acad. Sci. USA* 91: 6889-6893, 1994.
29. Kreitman, R.J., Puri, R.K., Leland, P., Lee, B., and Pastan, I.: Site-specific conjugation to interleukin 4 containing mutated cysteine residues produces interleukin 4-toxin conjugates with improved binding and activity. *Biochemistry* 33: 11637-11644, 1994.
30. Reiter, Y., Kreitman, R.J., Brinkmann, U., and Pastan, I.: Cytotoxic and antitumor activity of a recombinant immunotoxin composed of disulfide-stablized anti-Tac Fv fragment and truncated *Pseudomonas* exotoxin. *Int. J. Cancer* 58: 142-149, 1994.
31. Mesri, E.A., Ono, M., Kreitman, R.J., Klagsbrun, M., and Pastan, I.: The heparin-binding domain of heparin-binding EGF-like growth factor can target *Pseudomonas* exotoxin to kill cells exclusively through heparan sulfate proteoglycans. *J. Cell. Sci.* 107: 2599-2608, 1994.
32. Puri, R.K., Leland, P., Kreitman, R.J., and Pastan, I.: Human neurological cancer cells express interleukin-4 (IL-4) receptors which are targets for the toxic effects of IL4-*Pseudomonas* exotoxin chimeric protein. *Int. J. Cancer* 58: 574-581, 1994.

33. Kobayashi, K., Morita, S., Sawada, H., Mizuguchi, T., Yamada, K., Nagatsu, I., Fujita, K., Kreitman, R.J., Pastan, I., and Nagatsu, T.: Immunotoxin-mediated conditional disruption of specific neurons in transgenic mice. *Proc. Natl. Acad. Sci. USA* 92: 1132-1136, 1995.
34. Webber, K.O., Kreitman, R.J., and Pastan, I.: Rapid and specific uptake of anti-Tac disulfide-stabilized Fv by interleukin-2 receptor-bearing tumors. *Cancer Res.* 55: 318-323, 1995.
35. Kreitman, R.J., and Pastan, I.: Importance of the glutamate residue of KDEL in increasing the cytotoxicity of *Pseudomonas* exotoxin derivatives and for increased binding to the KDEL receptor. *Biochem. J.* 307: 29-37, 1995.
36. Webber, K.O., Reiter, Y., Brinkmann, U., Kreitman, R., and Pastan, I.: Preparation and characterization of a disulfide-stabilized Fv fragment of the anti-Tac antibody: comparison with its single-chain analog. *Molec. Immunol.* 32: 249-258, 1995.
37. Kreitman, R.J., Puri, R.K., McPhie, P., and Pastan, I.: Circularly permuted Interleukin 4 retains proliferative and binding activity. *Cytokine.* 7: 311-318, 1995.
38. Kreitman, R.J., Puri, R.K., and Pastan, I.: Increased antitumor activity of a circularly permuted IL4-toxin in mice with IL4 receptor-bearing human carcinoma. *Cancer Res.* 55: 3357-3363, 1995.
39. Chan, C., Blazar, B.R., Eide, C.R., Kreitman, R.J., and Vallera, D.A.: A murine cytokine fusion toxin specifically targeting the murine granulocyte-macrophage colony-stimulating factor (GM-CSF) receptor on normal committed bone marrow progenitor cells and GM-CSF-dependent tumor cells. *Blood* 86: 2732-2740, 1995.
40. Kreitman, R.J., and Pastan, I.: Targeting *Pseudomanas* exotoxin to hematologic malignancies. *Semin. Cancer. Biol.* 6: 297-306, 1996.
41. Puri, R.K., Leland, P., Obiri, N.I., Husain, S.R., Kreitman, R.J., Haas, G.P., Pastan, I., and Debinski, W.: Targeting of Interleukin-13 receptor on human renal cell carcinoma cells by a recombinant chimeric protein composed of interleukin-13 and a truncated form of Pseudomonas exotoxin A (PE38QQR). *Blood* 87: 4333-4339, 1996.
42. Mavroudis, D.A., Jiang, Y.Z., Hensel, N., Lewalle, P., Couriel, D., Kreitman, R.J., Pastan, I., and Barrett, A.J.: Specific depletion of alloreactivity against haplotype mismatched related individuals: a new approach to graft-versus-host disease prophylaxis in haploidentical bone marrow transplantation. *Bone Marrow Transplantation* 17: 793-799, 1996.
43. Chan, C., Blazar, B.R., Eide, C.R., Greenfield, L., Kreitman, R.J., and Vallera, D.A.: Reactivity of murine cytokine fusion toxin, DT_{390}-mIL-3, with bone marrow progenitor cells. *Blood* 88: 1445-1456, 1996.
44. Vallera, D.A., Panoskaltsis-Mortari, A., Jost, C., Ramakrishnan, S., Eide, C.R., Kreitman, R.J., Nicholls, P.J., Pennell, C., and Blazar, B.R.: Anti-graft-versus-host disease effect of DT_{390}-anti-CD3sFv, a single-chain Fv fusion

immunotoxin specifically targeting the CD3e moiety of the T-cell receptor. *Blood.* 88: 2342-2353, 1996.

45. Rozemuller, H., Rombouts, W.J.C., Touw, I.P., FitzGerald, D.J.P., Kreitman, R.J., Pastan, I., Hagenbeek, A. and Martens, A.C.M.: Treatment of acute myelocytic leukemia with interleukin-6 *Pseudomonas* exotoxin fusion protein in a rat leukemia model. *Leukemia* 10: 1796-1803, 1996.
46. Puri, R.K., Leland, P., Obiri, N.I., Husain, S.R., Mule, J., Pastan, I., and Kreitman, R.J.: An improved circularly permuted Interleukin 4-toxin is highly cytotoxic to human renal cell carcinoma cells. *Cell. Immunol.* 171: 80-86, 1996.
47. Puri, R.K., Hoon, D.S., Leland, P., Snoy, P., Rand, R.W., Pastan, I., and Kreitman, R.J.: Preclinical development of a recombinant toxin containing circularly permuted interleukin 4 and truncated *Pseudomonas* exotoxin for therapy of malignant astrocytoma. *Cancer Res.* 56: 5631-5637, 1996.
48. Husain, S.R., Gill, P., Kreitman, R.J., Pastan, I., and Puri, R.K.: Interleukin-4 receptor expression on AIDS-associated Kaposi's sarcoma cells and their targeting by a chimeric protein comprised of circularly permuted IL-4 and Pseudomonas exotoxin. *Molecular Medicine.* 3: 327-338, 1997.
49. Kreitman, R.J., and Pastan, I.: Recombinant toxins containing human granulocyte-macrophage colony-stimulating factor and either Pseudomonas exotoxin or diphtheria toxin kill gastrointestinal cancer and leukemia cells. *Blood.* 90: 252-259, 1997.
50. Rozemuller, H., Rombouts, E.J.C., Touw, I.P., FitzGerald, D.J.P., Kreitman, R.J., Pastan, I., Hagenbeek, A., and Martens, A.C.M.: Sensitivity of human acute myeloid leukaemia to diphtheria toxin-GM-CSF fusion protein. *Br. J. Haematol.* 98: 952-959, 1997.
51. Frankel, A.E., Hall, P.D., Burbage, C., Vesely, J., Willingham, M., Bhalla, K., and Kreitman, R.J.: Modulation of the apoptotic response of human myeloid leukemia cells to a diphtheria toxin granulocyte-macrophage colony-stimulating factor fusion protein. *Blood.* 90: 3654-3661, 1997.
52. Terpstra, W., Rozemuller, H., Breems, D.A., Rombouts, E.J.C., Prins, A., FitzGerald, D.J.P., Kreitman, R.J., Wielenga, J.J., Ploemacher, R.E., Lowenberg, B., Hagenbeek, A., and Martens, A.C.M.: Diphtheria toxin fused to granulocyte-macrophage colony-stimulating factor eliminates acute myeloid leukemia cells with the potential to initiate leukemia in immunodeficient mice, but spares normal hematopoietic stem cells. *Blood.* 90: 3735-3742, 1997.
53. Gu, L., Zhou, M., Jurickova, I., Yeager, A.M., Kreitman, R.J., Pastan, I., Phillips, C.N., and Findley, H.W.: Expression of interleukin-6 receptors by pediatric acute lymphoblastic leukemia cells with the t(4;11) translocation: a possible target for therapy with recombinant IL6-*Pseudomonas* exotoxin. *Leukemia.* 11: 1779-1786, 1997.

54. FitzGerald, D., Kreitman, R.J., and Pastan, I. Antibody-toxin and growth factor-toxin fusion proteins, engineering. Encyclopedia of Cancer, Vol. 1, pp. 34-40, 1997.
55. Kreitman, R.J., and Pastan, I.: Immunotoxins for treating cancer and autoimmune disease. In: (ed.), CRC 1997
56. Kreitman, R. J. Getting plant toxins to fuse, *Leukemia Res.*. 21: 997-999, 1997.
57. Hessler, J.L., and Kreitman, R.J.: An early step in Pseudomonas exotoxin action is removal of the terminal lysine residue, which allows binding to the KDEL receptor. *Biochemistry*, 36: 14577-14582, 1997.
58. Boayue, K.B., Yeager, A.M., Kreitman, R.J., and Findley, H.W.: Pediatric acute myelogenous leukemia cells express IL-6 receptors and are sensitive to a recombinant IL-6-*Pseudomonas* exotoxin. *Leukemia.* 12: 182-191, 1998.
59. Rajagopal, V., Pastan, I., and Kreitman, R.J.: A form of anti-Tac(Fv) which is both single-chain and disulfide stablized: comparison with its single-chain and disulfide-stabilized homologs. *Protein Engineering.* 10: 1453-1459, 1997.
60. Kreitman, R.J., and Pastan, I.: Accumulation of a recombinant immunotoxin *in vivo*: less than 1000 molecules per cell is sufficient for complete responses. *Cancer Res.* 58: 968-975, 1998.
61. Sawada, H., Nishii, K., Suzuki, T., Hasegawa, K., Hata, T., Nagatsu, I., Kreitman, R.J., Pastan, I., Nagatsu, T., and Kobayashi, K.: Autonomic neuropathy in transgenic mice caused by immunotoxin targeting of the peripheral nervous system. *J. Neurosci. Res.* 51: 162-173, 1998.
62. Kreitman, R.J.: IBC's international conference on novel therapeutic proteins for oncology (drug discovery and development). *Exp. Opin. Invest. Drugs.* 7: 659-667, 1998.
63. Kobayashi, H., Han, E., Kim, I., Le, N., Rajagopal, V., Kreitman, R.J., Pastan, I., Paik, C.H., and Carrasquillo, J.A.: Similarities in the biodistribution of iodine-labeled anti-Tac single-chain disulfide-stabilized Fv Fragment and anti-Tac disulfide-stabilized Fv Fragment. *Nucl. Med. Biol.* 25: 387-393, 1998.
64. Kreitman, R.J., and Pastan, I.: Immunotoxins for targeted cancer therapy. *Advanced Drug Delivery Reviews.* 31: 53-88, 1998.
65. Rozemuller, H., Rombouts, E.J.C., Touw, I.P., FitzGerald, D.J.P., Kreitman, R.J., Hagenbeek, A., and Martens, A.C.M.: *In vivo* targeting of leukemic cells using diphtheria toxin fused to murine GM-CSF. *Leukemia.* 12: 710-717, 1998.
66. Hall, P.D., Kreitman, R.J., Willingham, M.C. and Frankel, A.E. Toxicology and pharmacokinetics of DT388-GM-CSF, a fusion toxin consisting of a truncated diphtheria toxin (DT388) linked to human granulocyte-macrophage colony stimulating factor (GM-CSF), in C57BL/6 mice. *Toxicol. Appl. Pharmacol.* 150: 91-97, 1998.

67. Hogge, D.E., Willman, C.L., Kreitman, R.J., Berger, M., Hall, P.D., Kopecky, K.J., McLain, C., Tagge, E.P., Eaves, C.J., and Frankel, A.E.: Malignant Progenitors From Patients With Acute Myelogenous Leukemia Are Sensitive to a Diphtheria Toxin-Granulocyte-Macrophage Colony-Stimulating Factor Fusion Protein. *Blood.* 92: 589-595, 1998.
68. Frankel, A.E., Hall, P.D., McLain, C., Safa, A.R., Tagge, E.P., and Kreitman, R.J.: Cell-specific modulation of drug resistance in acute myeloid leukemic blasts by diphtheria fusion toxin, DT388-GMCSF. *Bioconjugate Chemistry.* 9: 490-496, 1998.
69. Husain, S.E., Behari, N., Kreitman, R.J., Pastan, I., and Puri, R.K.: Complete regression of established human glioblastoma tumor xenografts by interleukin-4 toxin therapy. *Cancer Res.* 58: 3649-3653, 1998.
70 Akamatsu, Y., Murphy, J. C., Nolan, K. F., Kreitman, R. J., Leung, S., and Junghans, R. P. A single-chain immunotoxin against carcinoembryonic antigen that supresses growth of colorectal carcinoma cells, *Clin. Cancer Res.* 4: 2825-2832, 1998.
71. Watanabe, D., Inokawa, H., Hashimoto, K., Suzuki, N., Kano, M., Shigemoto, R., Hirano, T., Toyama, K., Kaneko, S., Yokoi, M., Moriyoshi, K., Suzuki, M., Kobayashi, K., Nagatsu, T., Kreitman, R.J., Pastan, I., and Nakanishi, S.: Ablation of cerebellar Golgi cells disrupts synaptic integration involving GABA inhibition and NMDA receptor activation in motor coordination. *Cell.* 95: 17-27, 1998.
72. Hassan, R., Wu, C., Brechbiel, M. W., Margulies, I., Kreitman, R. J., and Pastan, I. Indium 111-labeled Monoclonal antibody K1: biodistribution study in nude mice bearing a human carcinoma xenograft expressing mesothelin, *Int. J. Cancer* 80: 559-563, 1999.
73. Rozemuller, H., Terpstra, W., Rombouts, E.J.C., Lawler, M., Byrne, C., FitzGerald, D.J.P., Kreitman, R.J., Wielenga, J.J., Lownberg, B., Touw, I.P., Hagenbeek, A., and Martens, A.C.: GM-CSF receptor targeted treatment of primary AML in SCID mice using diphtheria toxin fused to huGM-CSF. *Leukemia.* 12: 1962-1970, 1998.
74. Harris, D.T., Sakiestewa, D., Lyons, C., Kreitman, R.J., and Pastan, I.: Prevention of graft-versus-host disease (GVHD) by elimination of recipient-reactive donor T cells with recombinant toxins that target the interleukin 2 (IL-2) receptor. *Bone Marrow Transplantation.* 23: 137-144, 1999.
75. Kreitman, R.J., Wang, Q.C., FitzGerald, D.J.P., and Pastan, I.: Complete regression of human B-cell lymphoma xenografts in mice treated with recombinant anti-CD22 immunotoxin RFB4(dsFv)-PE38 at doses tolerated by Cynomolgus monkeys. *Int. J. Cancer* 81: 148-155, 1999.
76. Arni, R.K., Ward, R.J., Kreitman, R.J., Kumar, K., and Walz, F.G.: Three dimensional structure of ribonuclease T_1 complexed with an isosteric phosphonate substrate analog of GpU: Alternate substrate binding modes and catalysis. *Biochemistry,* 38: 2452-2461, 1999.

77. Friedrich, K., Wietek, S., Lischke, A., Wellbrock, C., Kreitman, R.J., Pastan, I., and Sebald, W.: A two-step selection approach for the identification of ligand-binding determinants in cytokine receptors. *Analytical Biochemistry.* 268: 179-186, 1999.
78. Frankel, A.E., Berger, M., Lilly, M., Kreitman, R., Hogge, D., Beran, M., Freedman, M.H., Emanuel, P.D., McLain, C., Hall, P., Tagge, E., Berger, M., and Eaves, C.: Diphtheria toxin fused to granulocyte-macrophage colony-stimulating factor is toxic to blasts from patients with juvenile myelomonocytic leukemia and chronic myelomonocytic leukemia but is nontoxic to normal myeloid progenitors. *Blood.* 91: 4279-4286, 1998.
79. Kreitman, R.J.: Recombinant toxins in haematologic malignancies and solid tumours. *Expert Opinion on Investigational Drugs.* 7: 1405-1427, 1998.
80. Hall, P.D., Willingham, W.C., Kreitman, R.J., and Frankel, A.E.: DT388-GM-CSF, a novel fusion toxin consisting of a truncated diphtheria toxin fused to human granulocyte-macrophage colony stimulating factor, prolongs survival in a SCID model of acute myelogenous leukemia. *Leukemia.* 13: 629-633, 1999.
81. Jwang, B., Yerushalmi, N., Kreitman, R.J., Engberg, J., and Pastan, I.: A scFv phage clone that binds to human b_2-microglobulin. *Immunotechnology.* 4: 231-236, 1999.
82. Frankel, A.E., Ramage, J., Latimer, A., Feely, T., Delatte, S., Hall, P., Tagge, E., Kreitman, R., and Willingham, M.: High-Level Expression and Purification of the Recombinant Diphtheria Fusion Toxin DTGM for PHASE I Clinical Trials. *Protein Expr Purif.* 16: 190-201, 1999.
83. Kim, C.N., Bhalla, K., Kreitman, R.J., Willingham, M.C., Hall, P., Tagge, E.P., Jia, T., and Frankel, A.E.: Diphtheria toxin fused to granulocyte-macrophage colony-stimulating factor and Ara-C exert synergistic toxicity against human AML HL-60 cells. *Leukemia Research.* 23: 527-538, 1999.
84. Husain, S.R., Kreitman, R.J., Pastan, I., and Puri, R.K.: Interleukin-4 receptor-directed cytotoxin therapy of AIDS-associated kaposi's sarcoma tumors in xenograft model. *Nature Medicine.* 5: 817-822, 1999.
85. Hotchkiss, C.E., Hall, P.D., Cline, J.M., Willingham, M.C., Kreitman, R.J., Gardin, J., Latimer, A., Ramage, J., Feely, T., DeLatte, S., Tagge, E.P., and Frankel, A.E.: Toxicology and pharmacokinetics of DTGM, a fusion toxin consisting of a truncated diphtheria toxin (DT388) linked to human granulocyte-macrophage colony-stimulating factor, in cynomolgus monkeys. *Toxicology and Applied Pharmacology.* 158: 152-160, 1999.
86. Kreitman, R.J.: Immunotoxins in cancer therapy. *Curr. Opin. Immunol.* 11: 570-578, 1999.
87. Kreitman, R.J. and Pastan, I: Targeted toxin hybrid proteins. In: D. Oxender and L. E. Post (eds.), *Novel Therapeutics from Modern Biotechnology,* pp. 89-110. Heidelberger Platz 3/D-14197 Berlin/Germany: Springer-Verlag Berlin, 1999.

88. Kreitman, R.J., Wilson, W.H., Robbins, D., Margulies, I., Stetler-Stevenson, M., Waldmann, T.A., and Pastan, I.: Responses in refractory hairy cell leukemia to a recombinant immunotoxin. *Blood.* 94: 3340-3348, 1999.
89. Onda, M., Kreitman, R.J., Wang, Q.C., and Pastan, I.: Reduction of the nonspecific toxicity of anti-Tac(Fv)-PE38 by mutations in the framework regions of the Fv which lower the isoelectric point. *J. Immunol.* 163:6072-6077, 1999.
90. Kreitman, R. J. and Cheson, B. D. Treatment of hairy cell leukemia at the close of the 20th century, *Hematology.* 4: 283-303, 1999
91. Kreitman, R.J.: New anti-leukemia agents: recombinant immunotoxins. In: K. Atkinson (ed.), *Clinical bone marrow transplantation: a reference textbook.* Cambridge, pp. 1173-1181. Cambridge University Press, 2nd ed. 2000.
92. Frankel, A.E., Kreitman, R.J., and Sausville, E.A.: Targeted Toxins, *Clin. Cancer Res.* 6: 326-334, 2000.
93. Robbins, D.H., Margulies, I., Stetler-Stevenson, M., and Kreitman, R.J.: Hairy cell leukemia, a B-cell neoplasm which is particularly sensitive to the cytotoxic effect of anti-Tac(Fv)-PE38 (LMB-2). *Clin. Cancer Res.* 6: 693-700, 2000.
94. Xie, X.Y., Sorbara, L., Kreitman, R.J., Fukushima, P.I., Kingma, D.W., and Stetler-Stevenson, M.: Development of lymphoproliferative disorder of granular lymphocytes in association with hairy cell leukemia. *Leukemia & Lymphoma.* 37: 97-104, 2000.
95. Kreitman, R.J., Wilson, W.H., White, J.D., Stetler-Stevenson, M., Jaffe, E., Waldmann, T.A., and Pastan, I.: Phase I trial of recombinant immunotoxin Anti-Tac(Fv)-PE38 (LMB-2) in patients with hematologic malignancies. *J. Clin. Oncol.*, 18: 1622-1636, 2000.
96. Kreitman, R.J., Margulies, I., Stetler-Stevenson, M., Wang, Q.C., FitzGerald, D.J.P., and Pastan, I.: Cytotoxic activity of disulfide-stabilized recombinant immunotoxin RFB4(dsFv)-PE38 (BL22) towards fresh malignant cells from patients with B-cell leukemias. *Clinical Cancer Research,* 6: 1476-1487, 2000.
97. Kobayashi, H., Kao, C.H.K., Kreitman, R.J., Le, N., Kim, M.K., Brechbiel, M.W., Paik, C.H., Pastan, I., and Carrasquillo, J.A.: Pharmacokinetics of In-111- and I-125-labeled antiTac single-chain Fv recombinant immunotoxin, *Journal of Nuclear Medicine.* 41: 755-762, 2000.
98. Frankel, A.E., McCubrey, J.A., Miller, M.S., Delatte, S., Ramage, J., Kiser, M., Kucera, G.L., Alexander, R.L., Beran, M., Tagge, E.P., Kreitman, R.J., and Hogge, D.E.: Diphtheria toxin fused to human interleukin-3 is toxic to blasts from patients with myeloid leukemias, *Leukemia.* 14: 576-585, 2000.
99. Rajagopal, V., and Kreitman, R.J.: Recombinant toxins which bind to the urokinase receptor are cytotoxic without requiring binding to the a2 macroglobulin receptor. *J. Biol. Chem.* 275: 7566-7533, 2000.
100. Leland, P., Taguchi, J., Husain, S.R., Kreitman, R.J., Pastan, I., and Puri, R.K.: Human breast carcinoma cells express type IIIL-4 receptors and are

sensitive to antitumor activity of a chimeric IL-4-Pseudomonas exotoxin fusion protein in vitro and in vivo, *Molecular Medicine.* 6: 165-178, 2000.

101. Rand, R.W., Kreitman, R.J., Patronas, N., Varricchio, F., Pastan, I., and Puri, R.K.: Intratumoral administration of a recombinant circularly permuted interleukin-4-*Pseudomonas* exotoxin in patients with high grade glioma, *Clin. Cancer Res.* 6: 2157-2165, 2000.
102. Kaneko, S., Hikida, T., Watanabe, D., Ichinose, H., Nagatsu, T., Kreitman, R.J., Pastan, I., and Nakanishi, S.: Synaptic integreation mediated by striatal sholinergic interneurons in basal ganglia function, *Science.* 289: 633-637, 2000.
103. Kreitman, R. J. and Pastan, I. Using cytokine receptors to target leukemia and lymphoma with fusion toxins, *Methods in Molecular Medicine: Drug Targeting*, 25: 215-226, 2000.
104. Keppler-Hafkemeyer, A., Kreitman, R.J., and Pastan, I.: Apoptosis induced by immunotoxins used in the treatment of hematologic malignancies. *Int. J. Cancer*, 87: 86-94, 2000.
105. Hassan, R., Viner, J., Wang, Q.C., Kreitman, R.J., and Pastan, I.: K1-LysPE38QQR, an immunotoxin targeting mesothelin, a cell surface antigen overexpressed in ovarian cancer and malignant mesothelioma. *J. Immunotherapy*, 23: 473-479, 2000.
106. Tsutsumi, Y., Onda, M., Nagata, S., Lee, B., Kreitman, R.J., and Pastan, I.: Site-specific chemical modification with polyethylene glycol of recombinant immunotoxin anti-Tac(Fv)-PE38 (LMB-2) improves antitumor activity and reduces animal toxicity and immunogenicity, *Proc Natl Acad Sci U S A.* 97: 8548-53, 2000.
107. Kreitman, R.J.: Immunotoxins, *Exp. Opin. Pharmacother.* 1: 1117-1129, 2000.
108. Onda, M., Willingham, M., Wang, Q., Kreitman, R.J., Tsutsumi, Y., Nagata, S., Dinarello, C.A., and Pastan, I.: Inhibition of TNF alph produced by Kupffer cells protects against the non-specific liver toxicity of immunotoxin anti-Tac(Fv)-PE38, LMB-2, *J Immunol.* 165: 7150-6, 2000.
109. Bast, R. C., Zalutsky, M. R., Kreitman, R. J., Sausville, E. A., and Frankel, A. E. Monoclonal Serotherapy. *In:* R. C. Bast, D. W. Kufe, R. E. Pollock, R. R. Weichselbaum, J. E. Holland, and E. Frei (eds.), Cancer Medicine, 5 edition, Vol. 1, pp. 860-875. Hamilton - London: B. C. Decker, 2000.
110. Kreitman, R.J.: Quantification of immunotoxin number for complete therapeutic response. *Methods in Molecular Biology.* 166: 111-123, 2001.
111. Rozemuller, H., Pastan, I., and Kreitman, R.J.: Isolation of new anti-CD30 scFvs from DNA immunized mice by phage display, and biologic activity of recombinant immunotoxins produced by fusion with truncated Pseudomonas exotoxin, *Int. J. Cancer*, 92: 861-870, 2001.
112. Kreitman, R.J. and Pastan, I.: Phase I trial of recombinant immunotoxin Anti-Tac(Fv)-PE38 (LMB-2) in patients with hematologic malignancies, *Biologic Therapy of Lymphoma.* 4: 9-14, 2001.

113. Pai-Scherf, L.H., Kreitman, R.J., and Pastan, I. Monoclonal antibodies: Basic Principles. Immunotoxins and recombinant immunotoxins. *In:* S. A. Rosenberg (ed.) Principles and practice of the biologic therapy of cancer, Third edition, pp. 382-395. Philadephia, PA: Lippincott Williams & Wilkins, 2000.
114. Kreitman, R.J. Immunoconjugate therapy. *In:* B. Cheson (ed.) Monoclonal antibody therapy of hematologic malignancies., pp. 151-169. Abingdon, Oxfordshire, UK: Darwin Scientific, 2001.
115. Onda, M., Nagata, S., Tsutsumi, Y., Vincent, J.J., Wang, Q.C., Kreitman, R.J., Lee, B., and Pastan, I.: Lowering the isoelectric point of the Fv portion of recombinant immunotoxins leads to decreased nonspecific animal toxicity without affecting antitumor activity, 61: 5070-5077, 2001.
116. Kreitman, R.J., Wilson, W.H., Bergeron, K., Raggio, M., Stetler-Stevenson, M., FitzGerald, D.J., and Pastan, I.: Efficacy of the Anti-CD22 Recombinant Immunotoxin BL22 in Chemotherapy-Resistant Hairy-Cell Leukemia, *New. Engl. J. Med.* 345: 241-247, 2001.
117. Hall, P.D., Virella, G., Willoughby, T., Atchley, D.H., Kreitman, R.J., and Frankel, A.E.: Antibody response to DT-GM, a novel fusion toxin consisting of a truncated diphtheria toxin (DT) linked to human granulocyte-macrophage colony stimulating factor (GM), during a phase I trial of patients with relapsed or refractory acute myeloid leukemia, 100: 191-197, 2001.
118. Kreitman, R.J.: Chimeric fusion proteins - *Pseudomonas* exotoxin-based, *Current Opinion in Investigational Drugs.* 2: 1282-1293, 2001.
119. Kreitman, R. J. Treatment of Hairy Cell Leukemia (editorial reply). New. Engl. J. Med., *345:* 1500, 2001.
120. Frankel, A. E., Powell, B. L., Hall, P. D., Case, L. D., and Kreitman, R. J. Phase I trial of a novel diphtheria toxin/granulocyte macrophage colony-stimulating factor fusion protein (DT388GMCSF) for refractory or relapsed acute myeloid leukemia. Clin Cancer Res, *8:* 1004-1013, 2002.
121. Joshi, B.H., Leland, P., Silber, J., Kreitman, R.J., Pastan, I., Berger, M., and Puri, R.K.: Medulloblastoma Tumors Serve as a Sensitive Target for a circular permuted IL-4-Pseudomonas exotoxin fusion protein., *British J. Cancer.* 86: 285-291, 2002
122. Salvatore, G., Beers, R., Kreitman, R. J., and Pastan, I. Improved Cytotoxic activity towards cell lines and fresh leukemia cells of a mutant anti-CD22 immunotoxin obtained by antibody phage display., *Clin Cancer Res.* 8: 995-1002, 2002.
123. Ohno, N., Kreitman, R. J., Saito, T., Masamoto, I., Uozumi, K., Hanada, S., Takeuchi, S., Furukawa, T., Sumizawa, T., Arima, T., and Akiyama, S. I. Augmentation of the activity of an immunotoxin, anti-Tac(Fv)-PE40KDEL, in T cell lines infected with human T cell leukemia virus type-I. *Leukemia & Lymphoma,* 43: 885-888, 2002.

124. Nagata, S., Onda, M., Numata, Y., Santora, K., Beers, R., Kreitman, R. J., and Pastan, I. Novel Anti-CD30 Recombinant Immunotoxins Containing Disulfide- stabilized Fv Fragments. Clin Cancer Res, *8:* 2345-2355., 2002.
125. Kreitman, R. J. Hairy cell leukemia. Established and novel approaches to treatment. Am J Cancer, *1:* 189-203, 2002.
126. Kreitman, R. J. Toxin-labeled monoclonal antibodies. Curr. Pharm. Biotechnol., *2:* 313-325, 2001.
127. Pastan, I. and Kreitman, R. J. Immunotoxins in cancer therapy. Curr Opin Investig Drugs, *3:* 1089-1091, 2001.
128. Kreitman, R. J. Recombinant fusion toxins for cancer treatment. Expert Opinion on Biological Therapy, *2:* 785-791, 2002.
129. Decker, T., Hipp, S., Kreitman, R. J., Pastan, I., Peschel, C., and Licht, T. Sensitization of B-cell chronic lymphocytic leukemia cells to recombinant immunotoxin by immunostimulatory phosphorothioate oligodeoxynucleotides. Blood, *99:* 1320-1326., 2002.
130. Sausville, J. E., Salloum, R., Sorbara, L., Kingma, D. W., Raffeld, M., Kreitman, R. J., Imus, P. D., Venzon, D., and Stetler-Stevenson, M. Minimal Residual Disease Detection in Hairy Cell Leukemia: Comparison of Flow Cytometric Immunophenotyping to Clonal Analysis Using Polymerase Chain Reaction for the Heavy Chain Gene. Am. J. Clin. Pathol., *119:* 213-217, 2003.
131. Kreitman, R. Targeted therapies - First International Congress. IDrugs, *5:* 949-954, 2002.
132. Kreitman, R. Monoclonal antibodies in cancer - Second International Congress. IDrugs, *5:* 1057-1061, 2002.
133. Kreitman, R.J. Immunotoxins for targeted cancer therapy. *In:* H. Lorberboum-Galski and P. Lazarovici (eds.), Chimeric toxins: mechanisms of action and therapeutic applications, Vol. 4, pp. 203-221. London and New York: Taylor & Francis, 2002.
134. Kreitman, R. J. Exotoxins. *In:* Wiley Encyclopedia of Molecular Medicine, pp. 1216-1219: John Wiley & Sons, Inc., 2002.
135. Kreitman, R.J.: Recombinant toxins for the treatment of cancer, *Current Opinion in Molecular Therapeutics.* 5: 44-51, 2003.
136. Kreitman, R. J. Taming ricin toxin. Nat Biotechnol, *21:* 372-374, 2003.
137. Kreitman, R. J. and Pastan, I. Immunobiologic treatments of hairy-cell leukemia. Best Pract Res Clin Haematol, *16:* 117-133, 2003.
138. Bast, R. C., Kousparou, C. A., Epenetos, A. A., Zalutsky, M. R., Sausville, E. A., and Frankel, A. E. Monoclonal Serotherapy. *In:* D. W. Kufe, R. E. Pollock, R. R. Weichselbaum, R. C. Bast, T. S. Gansler, J. E. Holland, and E. Frei (eds.), Cancer Medicine, 6 edition, Vol. 1, pp. 881-898. Hamilton - London: B. C. Decker, 2003.
139. de Jong, M.C., Scheffer, G.L., Broxterman, H.J., Hooijberg, J.H., Slootstra, J.W., Meloen, R.H., Kreitman, R.J., Husain, S.R., Joshi, B.H., Puri, R.K., and

Scheper, R.J.: Multidrug-resistant tumor cells remain sensitive to a recombinant interleukin-4-Pseudomonas exotoxin, except when overexpressing the multidrug resistance protein MRP1, *Clin Cancer Res.* 9: 5009-17, 2003.

140. Frankel, A.E., Neville, D.M., Bugge, T.A., Kreitman, R.J., and Leppla, S.H.: Immunotoxin therapy of hematologic malignancies, *Semin Oncol.* 30: 545-57, 2003.
141. Kreitman, R.J.: Tumor Targeting in Cancer Therapy (book review), *Ann Oncol.* 14: 1333, 2003.
142. Urieto, J.O., Liu, T., Black, J.H., Cohen, K.A., Hall, P.D., Willingham, M.C., Pennell, L.K., Hogge, D.E., Kreitman, R.J., and Frankel, A.E.: Expression and purification of the recombinant diphtheria fusion toxin DT388IL3 for phase I clinical trials, *Protein Expr Purif.* 33: 123-33, 2004.
143. FitzGerald, D. J., Kreitman, R., Wilson, W., Squires, D., and Pastan, I. Recombinant immunotoxins for treating cancer. Int J Med Microbiol, *293:* 577-582, 2004.
144. Beseth, B. D., Cameron, R. B., Leland, P., You, L., Varricchio, F., Kreitman, R. J., Maki, R. A., Jablons, D. M., Husain, S. R., and Puri, R. K. Interleukin-4 receptor cytotoxin as therapy for human malignant pleural mesothelioma xenografts. Ann Thorac Surg, *78:* 436-443, 2004.
145. Kreitman, R. J. Recombinant immunotoxins for the treatment of haematological malignancies. Expert Opin Biol Ther, *4:* 1115-1128, 2004.
146. Decker, T., Oelsner, M., Kreitman, R.J., Salvatore, G., Wang, Q.C., Pastan, I., Peschel, C., and Licht, T.: Induction of Caspase-Dependent Programmed Cell Death in B-Cell Chronic Lymphocytic Leukemia Cells by Anti-CD22 Immunotoxins, *Blood.* 103: 2718-26, 2004.
147. Ho, M., Kreitman, R.J., Onda, M., and Pastan, I.: In vitro antibody evolution targeting germline hot spots to increase activity of an anti-CD22 immunotoxin, *J Biol Chem.* 280: 607-17, 2005.
148. Kreitman, R.J. Targeting of pseudomonas exotoxin-based immunotoxins to hematologic malignancies. *In:* K. Kawakami, B. B. Aggarwal, and R. J. Puri (eds.), Cytotoxins and Immunotoxins for Cancer Therapy: Clinical Applications, Vol. 1, pp. 3-21. London, UK: CRC Press, 2005.
149. Kawakami, K., Kawakami, M., Kreitman, R.J., and Puri, R.K. Interleukin-4-targeted cytotoxin for glioblastoma therapy. *In:* K. Kawakami, B. B. Aggarwal, and R. J. Puri (eds.), Cytotoxins and Immunotoxins for Cancer Therapy: Clinical Applications, Vol. 1, pp. 23-43. London, UK: CRC Press, 2005.
150. Frankel, A.E., Hall, P.D., Cao, D., Liu, T.F., Moors, M., Cohen, K.A., Thorburn, A.M., and Kreitman, R.J. GM-CSF receptor-targeted therapy of human leukemia. *In:* K. Kawakami, B. B. Aggarwal, and R. J. Puri (eds.), Cytotoxins and Immunotoxins for Cancer Therapy: Clinical Applications, Vol. 1, pp. 149-169. London, UK: CRC Press, 2005.

151. Ise, T., Maeda, H., Santora, K., Xiang, L., Kreitman, R. J., Pastan, I., and Nagata, S. Immunoglobulin superfamily receptor translocation associated 2 protein on lymphoma cell lines and hairy cell leukemia cells detected by novel monoclonal antibodies. Clin Cancer Res, *11:* 87-96, 2005.
152. Bang, S., Nagata, S., Onda, M., Kreitman, R.J., and Pastan, I.: HA22 (R490A) is a recombinant immunotoxin with increased antitumor activity without an increase in animal toxicity, *Clin Cancer Res.* 11: 1545-50, 2005.
153. Onda, M., Willingham, M., Nagata, S., Bera, T. K., Beers, R., Ho, M., Hassan, R., Kreitman, R. J., and Pastan, I. New monoclonal antibodies to mesothelin useful for immunohistochemistry, fluorescence-activated cell sorting, Western blotting, and ELISA. Clin Cancer Res, *11:* 5840-5846, 2005.
154. Frankel, A.E. and Kreitman, R.J.: CLL immunotoxins, *Leuk Res.* 29: 985-6, 2005.
155. Kreitman, R. J. Confirmation and prevention of targeted toxicity by a recombinant fusion toxin. Mol Cancer Ther, *3:* 1691-1692, 2004.
156. Kreitman, R.J., Squires, D.R., Stetler-Stevenson, M., Noel, P., Fitzgerald, D.J., Wilson, W.H., and Pastan, I.: Phase I trial of recombinant immunotoxin RFB4(dsFv)-PE38 (BL22) in patients with B-cell malignancies, *J Clin Oncol.* 23: 6719-29, 2005.
157. Kioi, M., Takahashi, S., Kawakami, M., Kawakami, K., Kreitman, R.J., and Puri, R.K.: Expression and targeting of interleukin-4 receptor for primary and advanced ovarian cancer therapy, *Cancer Res.* 65: 8388-96, 2005.
158. Hassan, R., Kreitman, R.J., Pastan, I., and Willingham, M.C.: Localization of mesothelin in epithelial ovarian cancer, *Appl Immunohistochem Mol Morphol.* 13: 243-7, 2005.
159. Kreitman, R.J. Recombinant immunotoxins for patients with hematologic malignancies. *In:* A. Gayathri (ed.) Recent research developments in bioconjugate chemistry, Vol. 2, pp. 55-83. Kerala, India: Transworld Research Network, 2005.
160. Arons, E., Sorbara, L., Raffeld, M., Stetler-Stevenson, M., Steinberg, S. M., Liewehr, D. J., Pastan, I., and Kreitman, R. J.: Characterization of T-cell repertoire in hairy cell leukemia patients before and after recombinant immunotoxin BL22 therapy, *Cancer Immunol Immunother,* 55: 1-11, 2006.
161. Attia, P., Powell, D. J., Jr., Maker, A. V., Kreitman, R. J., Pastan, I., and Rosenberg, S. A.: Selective elimination of human regulatory T lymphocytes in vitro with the recombinant immunotoxin, LMB-2, *Journal of Immunotherapy,* 29: 208-214, 2006.
162. Arons, E., Margulies, I., Sorbara, L., Raffeld, M., Stetler-Stevenson, M., Pastan, I., and Kreitman, R. J.: Minimal residual disease in hairy cell leukemia patients assessed by clone-specific polymerase chain reaction, *Clin Cancer Res,* 12: 2804-2811, 2006.

163. Arons, E., Sunshine, J., Suntum, T., and Kreitman, R. J.: Somatic hypermutation and VH gene usage in hairy cell leukemia, *Br J Haematol,* 133: 504-512, 2006.
164. Kreitman, R. J.: Immunotoxins for Targeted Cancer Therapy, *AAPS J,* 8: E532-551, 2006.
165. Kreitman, R. J. and Pastan, I.: BL22 and lymphoid malignancies, *Best Pract Res Clin Haematol,* 19: 685-699, 2006.
166. Kreitman, R. J. and Pastan, I.: Immunotoxins in the treatment of refractory hairy cell leukemia, *Hematol Oncol Clin North Am,* 20: 1137-1151, 2006.
167. Pastan, I., Hassan, R., FitzGerald, D. J. P., and Kreitman, R. J.: Immunotoxin therapy of cancer, *Nat Rev Cancer,* 6: 559-565, 2006.
168. Ise, T., Kreitman, R. J., Pastan, I., and Nagata, S.: Sandwich ELISAs for soluble immunoglobulin superfamily receptor translocation-associated 2 (IRTA2)/FcRH5 (CD307) proteins in human sera, *Clin Chem Lab Med,* 44: 594-602, 2006.
169. Kimchi-Sarfaty, C., Vieira, W. D., Dodds, D., Sherman, A., Kreitman, R. J., Shinar, S., and Gottesman, M. M.: SV40 Pseudovirion Gene Delivery of a Toxin to Treat Human Adenocarcinomas in Mice, *Cancer Gene Ther,* 13: 648-657, 2006.
170. Onda, M., Nagata, S., Fitzgerald, D. J., Beers, R., Fisher, R. J., Vincent, J. J., Lee, B., Nakamura, M., Hwang, J., Kreitman, R. J., Hassan, R., and Pastan, I.: Characterization of the B Cell Epitopes Associated with a Truncated Form of Pseudomonas Exotoxin (PE38) Used to Make Immunotoxins for the Treatment of Cancer Patients, *J Immunol,* 177: 8822-8834, 2006.
171 Kreitman, R. J. and Pastan, I.: Immunotoxins in the treatment of hematologic malignancies, *Curr Drug Targets,* 7: 1301-1311, 2006.
172. Pastan, I., Hassan, R., Fitzgerald, D. J., and Kreitman, R. J.: Immunotoxin Treatment of Cancer, *Annu Rev Med,* 58: 221-237, 2007.
173. Ise, T., Nagata, S., Kreitman, R., Wilson, W., Wayne, A., Stetler-Stevenson, M., Bishop, M. R., Scheinberg, D. A., Rassenti, L., Kipps, T. J., Kyle, R. A., Jelinek, D. F., and Pastan, I.: Elevation of CD307 (IRTA2/FcRH5)protein in the blood and expression on malignant cells of patients with multiple myeloma, chronic lymphocytic leukemia, multiple myeloma and mantle cell lymphoma, *Leukemia,* 21: 169-174, 2007.
174. Kreitman, R., Wilson, W., and Pastan, I. Complete Remissions of Purine Analog-Resistant Hairy Cell Leukemia Induced by the Anti-CD22 Recombinant Immunotoxin BL22. *In:* B. S. Wheeler (ed.), Trends in Diphtheria Research, Vol. 1, pp. 11-35. New York: Nova Science Publishers, Inc., 2006.
175. Wayne, A. S., Kreitman, R. J., and Pastan, I.: Monoclonal Antibodies and Immunotoxins as New Therapeutic Agents for Childhood Acute Lymphoblastic Leukemia, *ASCO education book:* 576-601, 2007.

176. Arons, E., Suntum, T., Sunshine, J., Stetler-Stevenson, M., and Kreitman, R. J.: Immunoglobulin Light Chain Repertoire in Hairy Cell Leukemia, *Leuk Res*, 31: 1239-1244, 2007.

177. Filpula, D., Yang, K., Basu, A., Hassan, R., Xiang, L., Zhang, Z., Wang, M., Wang, Q., Ho, M., Beers, R., Zhao, H., Peng, P., Zou, J., Li, X., Petti, G., Janjua, A., Liu, J., Wu, D., Yu, D., Zhang, Z., Longley, C., FitzGerald, D., Kreitman, R. J., and Pastan, I.: Releasable PEGylation of Mesothelin Targeted Immunotoxin SS1P Achieves Single Dosage Complete Regression of a Human Carcinoma in Mice, *Bioconjugate Chemistry*, 18: 773-784, 2007.

178. Kreitman, R. J. Treatment of relapsed or refractory hairy cell leukemia and new frontiers in HCL therapy. *In:* M. Serekes, M. Kalaycio, and B. Bolwell (eds.), Clinical Malignant Hematology, Vol. 1, pp. 301-310. New York: McGraw-Hill, 2007.

179. Kreitman, R., Wilson, W., and Pastan, I.: Complete Remissions of Purine Analog-Resistant Hairy Cell Leukemia Induced by the Anti-CD22 Recombinant Immunotoxin BL22, *International Journal of Medical and Biological Frontiers*, 12: 175-198, 2006.

IN PRESS

180. Hassan, R., Bullock, S., Premkumar, A., Kreitman, R. J., Kindler, H., Willingham, M., and Pastan, I.: Phase I Study of SS1P, a Recombinant Anti-Mesothelin Immunotoxin Given as a Bolus Intravenous Infusion to Patients with Mesothelin Expressing Mesothelioma, Ovarian and Pancreatic Cancers, *Clin Cancer Res:* in press, 2007.
181. Powell, D. J. J., Felipe-Silva, A., Merino, M. J., Ahmadzadeh, M., Allen, T., Levy, C., White, D. E., Mavroukakis, S., Kreitman, R. J., Rosenberg, S. A., and Pastan, I.: Administration of a CD25-directed immunotoxin, LMB-2, to patients with metastatic melanoma induces a selective partial reduction in regulatory T cells in vivo*: J. Immunol.*, in press, 2007.
182. Arons, E., Suntum, T., Margulies, I., Yuan, C., Stetler-Stevenson, M., and Kreitman, R. J.: PRAME expression in Hairy Cell Leukemia, *Leukemia Res.:* in press, 2008.

183. Ahmad, E., Steinberg, S. M., Goldin, L., Hess, C. J., Caporaso, N., Kreitman, R. J., Wiestner, A., Wilson, W., White, T., Marti, G., and Stetler-Stevenson, M.: Immunophenotypic Features Distinguishing AQ2 Familial Chronic Lymphocytic Leukemia from Sporadic Chronic Lymphocytic Leukemia, *Cytometry B Clin Cytom:* in press, 2008.

SUBMITTED

184. Matsushita, K., Margulies, I., Onda, M., Nagata, S., Stetler-Stevenson, M., and Kreitman, R. J.: Soluble CD22 as a Tumor Marker for Patients with B-cell malignancies: submitted, 2008.

185. Alderson, R. F., Kreitman, R. J., Chen, T., Yeung, P., Fox, J. A., and Pastan, I.: CAT-8015: A Second-generation Pseudomonas Exotoxin A Based Immunotherapy Targeting CD22 Expressing Hematological Malignancies: submitted, 2008.